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| APPLICATION NO.  | FILING DATE   | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|---|----------------------|---------------------|------------------|
| 10/615,547   | 07/08/2003  | Blaine R. Southam    | 200208274-1         | 9040             |
| 22879 7590 11/28/2007<br>HEWLETT PACKARD COMPANY<br>P O BOX 272400, 3404 E. HARMONY ROAD |   |                      | EXAMINER            |                  |
|  |   |                      | JEAN GILLES, JUDE   |                  |
|  | ECTUAL PROPERTY ADMINISTRATION<br>OLLINS, CO 80527-2400 |                      | ART UNIT            | PAPER NUMBER     |
|  |   |                      | 2143                |                  |
|  |   |                      |                     |                  |
|  |   |                      | MAIL DATE           | DELIVERY MODE    |
|  |   |                      | 11/28/2007          | PAPER            |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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|--|---|--|---|--|--|
| Office Action Summary  |   | Application No.  | Applicant(s)  |  |  |
|  |   | 10/615,547   | SOUTHAM ET AL.  |  |  |
|  |   | Examiner   | Art Unit  |  |  |
|  |   | Jude J. Jean-Gilles  | 2143  |  |  |
| Period fo  | The MAILING DATE of this communication app<br>or Reply  | ears on the cover sheet with the (   | correspondence address  |  |  |
| WHIC<br>- Exter<br>after<br>- If NC<br>- Failu<br>Any  | ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DAIS nsions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Depriod for reply is specified above, the maximum statutory period we are to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing end patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION  BEGON, In no event, however, may a reply be till  Till apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N. mely filed the mailing date of this communication. ED (35 U.S.C. § 133). |  |  |
| Status   |   |  |   |  |  |
| 1)⊠  | Responsive to communication(s) filed on <u>09/18</u>  |  |   |  |  |
| ,  | This action is <b>FINAL</b> . 2b)⊠ This action is non-final.  |  |   |  |  |
| 3)[  | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.   |  |   |  |  |
|  | closed in accordance with the practice under E  | х рапе Quayle, 1935 С.Б. 11, 4   | 53 O.G. 213.  |  |  |
| Disposit   | ion of Claims   |  |   |  |  |
| <ul> <li>4)  Claim(s) 1,2,5,8,21,24,31-33 and 36-40 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) 1,2,5,8,21,24,31-33 and 36-40 is/are rejected.</li> <li>7)  Claim(s) is/are objected to.</li> </ul>   |   |  |   |  |  |
| 8) Claim(s) are subject to restriction and/or election requirement.  Application Papers  |   |  |   |  |  |
|  | The specification is objected to by the Examine   | r  |   |  |  |
| 10)⊠ The drawing(s) filed on <u>08 July 2003</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.  |   |  |   |  |  |
| ,—   | Applicant may not request that any objection to the   | · · · · · · · · · · · · · · · · · · ·  | -   |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |   |  |   |  |  |
| Priority (   | under 35 U.S.C. § 119   |  |   |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul> |   |  |   |  |  |
| 2) Notice 3) Information   | ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) er No(s)/Mail Date   | 4) Interview Summary Paper No(s)/Mail D 5) . Notice of Informal I 6) . Other:  | Pate  |  |  |

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#### **DETAILED ACTION**

This office action is responsive to RCE communication filed on 09/18/2007.

### Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office Action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 1, 2, 8, 31-33, 36, 36, and 39 are rejected under 35 U.S.C. 102(e) as being anticipated by Knauerhase et al (Knauerhase), U.S. Pub. No. 2005/0021663 A1.

Regarding claims 1, 2, 8, 31-33, 36, 36, and 39, Knauerhase discloses:

1. (Currently amended) A method for testing a web service (*fig.* 6), the method comprising:

a web service under test receiving a request from a client (par. 0030-0031; the web service is under test to determine the status of the client placing the request);

the web service under test sending a message related to the received client request to an actual web service deployed on the Internet (par. 0034);

a redirection service intercepting a the message sent by a the web service under test before the message reaches the actual web service (par. 0034; the pseudo service

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provider receives the web service request prior to submission for processing to the identified web service);

the redirection service identifying a mock web service to which the message should be redirected, the mock web service that being configured to emulate operation of the actual web service (par. 0034, 0043; in figs. 4 and 6; the intermediary Module 618 is the redirector which operate to monitor and, redirecting the web service request to either the pseudo service provider (mock service) or to identify a web service to handle the request); and

the redirection service redirecting the message to the mock web service for processing (see par. 0043; fig. 6, item 618 is the intermediary Module 618 is the redirector which operate to monitor and, redirecting the web service request to either the pseudo service provider (mock service) .

2. (Currently amended) The method of claim 1, wherein the web service under test receiving a request from a client comprises the web service under test receiving a request from a mock client using a web protocol (fig. 3; par. 0016, and 0031; a pseudo registry and pseudo service provider are integral components of the client that operates in conjunction with the client web services software", thereby transforming the client into a test or mock client; see also par. 0003-0005 with respect to the mock client using the web protocol).

3-4. (Canceled)

6-7. (Canceled)

8. (Currently amended) The method of claim 1, further comprising the redirection service receiving a response from the mock web service and transmitting the response to the web service under test (*par. 0016, 0028, and 0033*).

9-20. (Canceled)

21. (Currently amended) A computer-readable medium that stores a redirection service for use in testing a network service, the redirection service being configured to: intercept a message transmitted by a web service under test to an actual web service deployed on the Internet (par. 0030-0034), identify a mock web service to which the message should be redirected (par. 0034, 0043; in figs. 4 and 6), the mock web service being configured to emulate operation of the actual web service; and redirect the message to the mock web service for processing (par. 0034, 0043; in figs. 4 and 6; the intermediary Module 618 is the redirector which operate to monitor and, redirecting the web service request to either the pseudo service provider (mock service) or to identify a web service to handle the request).

22-23. (Canceled)

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25-30. (Canceled)

31. (Currently amended) The method of claim 1, wherein intercepting a message comprises intercepting a message directed via a hypertext transfer protocol to the actual web service (see par. 0003, and 0005).

- 32. (Currently amended) The method of claim 1, wherein intercepting a the message comprises intercepting a hypertext markup language (HTML) message or an extensible markup language (XML) message (see par. 0003, and 0005).
- 33. (Currently amended) A method for testing a web service, the method comprising:

a mock client that emulates an actual client sending a request to a web site associated with a web service under test (fig. 3; par. 0016, and 0031; a pseudo registry and pseudo service provider are integral components of the client that operates in conjunction with the client web services software", thereby transforming the client into a test or mock client; see also par. 0003-0005 with respect to the mock client using the web protocol).

the web service under test receiving the request and directing a related request to a web site associated with an actual web service that is deployed on the Internet (par.

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0034; inherently, the use of web services includes the use of web sites to associate the use of the different services with the Internet; see par. 003-0005);

a redirection service intercepting the related request such that the related request does not reach the web site associated with the actual web service (par. 0034; the pseudo service provider receives the web service request prior to submission for processing to the identified web service);

the redirection service identifying a mock web service to which the message should be redirected, the mock web service being configured to emulate operation of the actual web service (par. 0034, 0043; in figs. 4 and 6);

the redirection service rerouting the related request to a the mock web service that emulates operation of the actual web service (par. 0034, 0043; in figs. 4 and 6);

the mock web service identifying a response output responsive to the related request and transmitting the response output to the redirection service; and the redirection service transmitting the response output to the web service under test (par. 0016, 0028, and 0033).

34-35. (Canceled)

36. (Previously presented) The method of claim 33, wherein directing a related request to a web site associated with an actual web service comprises sending a hypertext markup language (HTML) message or an extensible markup language (XML) message via hypertext transfer protocol (HTTP) (see par. 0003, and 0005).

38. (Previously presented) The method of claim 33, wherein the mock client, web service under test, and the mock web service execute on top of a virtual machine (0045).

# 39. (New) A testing system, comprising:

a mock client that emulates operation of an actual web client, the mock client being configured to send via a web protocol requests to a web service under test (fig. 3; par. 0016, and 0031; a pseudo registry and pseudo service provider are integral components of the client that operates in conjunction with the client web services software", thereby transforming the client into a test or mock client; see also par. 0003-0005 with respect to the mock client using the web protocol).

a web service under test configured to (i) receive the requests sent by the mock client, (ii) generate related requests, and (iii) send via a web protocol the related requests to actual web services that are deployed on the Internet; (par. 0034; inherently, the use of web services includes the use of web sites to associate the use of the different services with the Internet; see par. 003-0005);

a redirection service configured to (i) intercept the related requests sent by the web service under test, (ii) identify a mock web services that emulates operation of the actual web service, (iii) redirect the related requests to the mock web services such that the related requests do not reach the actual web services, (iv) receive responses to the

related requests from the mock web services, and (v) send via a web protocol the responses to the web service under test (par. 0034; par. 0016, 0028, and 0033) and

a mock web service configured to (i) receive the related requests from the redirection service, (ii) identify associated responses, and (iii) send the responses to the redirection service (par. 0016, 0028, and 0033).

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 5, 24, 37, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knauerhase in view of Pfitzner, U.S. Pub. No 2004/0215826 A1.

Regarding **claim 20**, Knauerhase teaches the invention substantially as claimed. Knauerhase discloses the method of claim 1, but is silent on a method wherein identifying a mock web service comprises identifying a network address of the actual web service to which the message was sent in a redirection database that cross-references actual web services with associated mock web services.

In an analogous art, Pfitzner shows a mechanism for redirecting a client request to web services access data, sending a reference network address and other relevant computing data to the web services provider. Pfitzner teaches " The web server services 320 also may be a subset of conventional web server services that includes a conventional redirection service that redirects a reference address to another reference address using a one-to-one relationship between the received reference address and redirected reference address. The redirection decision rules may be stored using a relational database management system that is capable of being accessed through a web server (see Pfitzner; par. 0043).

Given these features, a person of ordinary skill in the art, at the time the invention was made, would have recognized the desirability and advantages of modifying the system of Knauerhase, to incorporate the redirection database and the techniques of identifying a reference network address of Pfitzner, in order to allow web services clients to select the appropriate web service providers. By this rationale. Claim 20 is rejected

Regarding claims 24, 37, and 40, the combination Knauerhase –Pfitzner teaches:

- 24. (Currently amended) The computer-readable medium of claim
- 21, wherein the redirection service comprises a redirection database that associates web addresses of actual web services to network addresses of mock web services(see Pfitzner; par. 0043).

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37. (Currently amended) The method of claim 33, wherein identifying a mock web service comprises the redirection service searching a database for a web address to which the related request is directed and identifying a network address associated with the mock web service(see Pfitzner; par. 0043).

40. (New) The system of claim 39, wherein the redirection service is configured to identify mock web services by referencing a redirection database that cross-references actual web services with associated mock web services (see Pfitzner; par. 0043).

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### Conclusion

5. THIS ACTION IS MADE NON-FINAL. Any inquiry concerning this communication or earlier communications from examiner should be directed to Jude Jean-Gilles whose telephone number is (571) 272-3914. The examiner can normally be reached on Monday-Thursday and every other Friday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley, can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-9000.

Jude Jean-Gilles

Patent Examiner

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JJG

November 25, 2007

And I